# **REMARKS/ARGUMENTS**

Claims 1-33 are pending. Claims 2-10, 14-21, 23-29, and 31-33 have been amended. No claims have been amended, canceled, added, or withdrawn. As a preliminary matter, a previous response filed on April 24, 2007 presented clear evidence of why the features in the pending claims are patentable over the cited references. Those arguments are not repeated verbatim herein, but are incorporated by reference. The Office is respectfully urged to review those arguments in view of the following remarks to reconsider and withdraw the outstanding rejections to the pending claims.

Applicant has requested a telephone interview (please see the attached Applicant Initiated Interview Request Form) with to discuss these outstanding rejections. This request for reconsideration presents the topics for discussion. Applicant looks forward to that discussion, hoping to move this application to allowance independent of filing an appeal.

## Allowable Subject Matter

Applicant thanks the Office for indicating that claims 5-7, 15, 17, 23 and 26 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant respectfully submits that for the following reasons the other pending claims are also allowable over the cited art.

#### Claim Objection

Claim 21 has been amended to more clearly show antecedent basis with "the computer readable medium of claim 13."

Withdrawal of the objection to claim 1 is requested.

In the spirit of the amendment to claim 21, the preambles of dependent claims 2-10, 14-20, 23-29, and 31-33 have also been amended to more clearly show antecedent basis on their respective base claim or any intervening claim. For example, the preamble of claim 2 was amended to change "[a] method as recited in claim 1" to "[t]he method of claim 1". Analogous changes were made to the other dependent claim preambles. Accordingly, these claim amendments are directed to original subject matter that the Office has already had the opportunity to examine, and as a result, these amendments not necessitate a new prior art search by the Office.

# 35 USC §102(b) Rejections

Claims 1, 2, 4, 8-14, 18-21, 30, 32 and 33 stand rejected under 35 USC §102(b) as being anticipated by US patent application serial number 6,101,276 to Adiletta et al ("Adiletta"). However, the Manual of Patent Examining Procedure (M.P.E.P.) states that a claim is anticipated by a reference only if each and every element as set forth in the claim can be found in the reference and, furthermore, that the identical invention must be shown in as complete detail as is contained in the claim.

A claim is anticipated **only** if each and every element set forth in the claim is found, either expressly or inherently described, in a single prior art reference. ... The **identical** invention **must** be shown in as complete detail as is contained in the ... claim.

(M.P.E.P. § 2131, subsection titled "TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM", emphasis added). Each of the independent claims 1, 13, and 30 include at least one feature not described by *Adiletta*. For at least this reason, the rejections under 35 U.S.C.

§ 102 of the independent claims 1, 13 and 30 should be withdrawn. Examples of claim features not found in *Adiletta* are given below.

Regarding claim 1, and to finally reject claim 1, the Action asserts that Figs. 7 and 8 of *Adiletta* describe "applying one or more motion filters to the ER measurements to generate a number of temporal sequences of motion patterns, the motion patterns being in a spatio-temporal data format, the number being a function of how many motion filters were applied to the ER measurements". The Applicant disagrees. *Adiletta's* description that "the frame's energy data, i.e. DC and AC components of DCT, are filtered as texture, edge or smoothness" clearly does not describe "temporal sequences of motion patterns, the motion patterns being in a spatio-temporal data format" (emphasis added), as claim 1 requires. Moreover, nowhere does this description associated with Figs. 7 and 8 indicate "generate a number of temporal sequences[,] the number being a function of how many motion filters were applied to the ER measurements" (emphasis added), as claim 1 also requires.

Attempting to support this rejection of claim 1, page 3 of the Action asserts that "motion patterns or visual types are obtained, where the frames 'energy data, i.e DC and AC components of DCT, are filtered as texture, edge or smoothness, in that the spatial motion and temporal data of the group of images is meticulously obtained and examined to yield patterns as illustrated in the graph on figure 7" (emphasis added). However, *Adiletta's* explicit description of Fig. 7 is:

"Referring now to FIG. 7, the PVW process (for an I-frame) is shown to include a mapping between the global statistics (e.g., mean, median, and variance) for the  $S_1$  values as related to an initial PVW value for each

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macroblock. Visual type classification process 62 is coupled to scaling operator 64, such that each initial PVW value is scaled by a factor which is dependent upon the visual type classification of the macroblock. The scaled value then serves as the PVW value for the particular macroblock. As will be discussed below, this value is used to calculate the resource allocation (bit assignment) for that macroblock."

Please note that nowhere does this description of figure 7 by *Adiletta* expressly, or under principles of inherency, describe "that "motion patterns or visual types are obtained, where the frames 'energy data, i.e DC and AC components of DCT, are filtered as texture, edge or smoothness, in that the spatial motion and temporal data of the group of images is meticulously obtained and examined to yield patterns", as asserted by the Action.

Additionally, Applicant respectfully submits that the Action's modification to *Adiletta* that the *Adiletta's* visual types are the claimed "motion patterns" (i.e., page 3 of the Action, "motion patterns or visual types are obtained ...") is unsupported. *Adiletta* does not even use the phrase "motion pattern." (*Adiletta* only expressly uses the term **pattern** in the following contexts: a "GOP pattern", a "code block pattern", "traversing the macroblock in a zig-zag pattern", and a "frame index pattern"). Thus, *Adiletta* does not describe, or fairly suggest, that visual type classifications are the claimed "temporal sequences of motion patterns, the motion patterns being in a spatio-temporal data format". Moreover, even assuming arguendo that *Adiletta* actually taught this modification, which it does not, this modification still does not describe each of the elements of this claimed clause.

Accordingly, Applicant respectfully submits that *Adiletta* fails to describe the identical invention of claim 1 in as complete detail as contained in claim 1. Thus, *Adiletta* cannot anticipate claim 1.

Independent claims 13 and 30 each include salient features similar to those of independent claim 1, and are therefore patentable for the same or similar reasons. Furthermore, dependent claims 2, 4, 8-12, 14, 18-21, 32 and 33 depend from respective ones of independent claims 1, 13 and 30, and are therefore patentable at least for reasons based on their respective dependencies.

Withdrawal of the 35 USC §102(a) rejection of claims 1, 2, 4, 8-14, 18-21, 30, 32 and 33 is respectfully requested.

### 35 USC §103 Rejections

Claims 3, 16, 22, 24, 25, 27-29 and 31 stand rejected under 35 USC §103(a) as being unpatentable over *Adiletta* and further in view of US patent application serial no. 6,782,135 to *Viscito et al* ("*Viscito*"). However, the M.P.E.P. states that, to support the rejection of a claim under 35 U.S.C. § 103(a), each feature of each rejected claim must be taught or suggested by the applied references, and that each of the words describing the feature must be taken into account.

To establish *prima facie* obviousness of a claimed invention, **all** the claim limitations **must** be taught or suggested by the prior art. ... **All** words in a claim **must** be considered in judging the patentability of that claim against the prior art.

(M.P.E.P. § 2143.03, emphasis added). Independent claims 1, 13, 22 and 30 are base claims of particular ones of dependent claims 3, 16, 22, 24, 25, 27-29 and 31. Each of the independent claims 1, 13, 22 and 30 includes at least one feature

not taught or fairly suggested by *Adilleta*, alone or in combination with *Viscito*, and is therefore patentable for at least this reason.

Claim 22 recites "deriving motion vector fields (MVFs) between frames of a video sequence as a function of a sliding window comprising a configurable number of the frames" (emphasis added). The Action admits that *Adilleta* does not teach this feature. Attempting to arrive at the submitted missing feature, the Action modifies *Adilleta* with *Viscito*. Specifically, the Action points to col. 16, line 3-17, where *Viscito* discloses the use of motion vector fields for temporal analysis. The Action combines this with the teachings *Adilleta's* use of a recursive rate control quantization scheme to send feedback to a quantization unit for cyclically updating quantization parameters to modify frame data content. Clearly, this description of deriving a motion vector combined with recursive quantization operations does not teach, or fairly suggest, "deriving motion vector fields (MVFs) between frames of a video sequence as a function of a sliding window comprising a configurable number of the frames", as claim 22 requires.

Withdrawal of the 35 USC §103(a) rejection of claim 22 is requested.

Claims 24, 25, and 27-29 depend from independent claim 22 and are not obvious over the cited combination at least for reasons based on their respective dependency on this allowable base claim. Withdrawal of the 35 USC §103(a) rejection of claims 24, 25, and 27-29 is requested.

For the reasons already discussed above, *Adilleta* does not teach or fairly suggest the features of **independent claims 1, 13 and 30**. *Adilleta* is combined with *Viscito* for the teaching of using motion vector fields for temporal analysis. However, Applicant respectfully submits that this combination fails to cure the already discussed deficiencies of the primary reference, *Adilleta*. Instead, the

combination provides for computing energy values to select an optimal macroblock compression algorithm (*Adilleta*), wherein motion vector fields are used for temporal analysis (*Viscito*). Clearly, and at least for the discussed reasons, this combination at least fails to teach or suggest "applying one or more motion filters to the ER measurements to generate a number of temporal sequences of motion patterns, the motion patterns being in a spatio-temporal data format, the number being a function of how many motion filters were applied to the ER measurements", as claim 1 requires.

Independent claims 13 and 30 each include salient features similar to those of independent claim 1, and are therefore patentable for the same or similar reasons. Furthermore, dependent claims 3, 16 and 31 depend from respective ones of independent claims 1, 13 and 30, and are therefore patentable at least for reasons based on their respective dependencies on an allowable base claim.

Accordingly, withdrawal of the 35 USC §103(a) rejection of claims 3, 16, 16, and 31 is also requested.

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**Conclusion** 

Pending claims 1-33 are in condition for allowance and action to that end

is urgently requested. Should any issue remain that prevents allowance of the

application, the Examiner is encouraged to contact the undersigned prior or

issuance of a subsequent action.

Respectfully Submitted,

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By: / Brian G. Hart Reg. No. 44,421 /

Brian G. Hart Reg. No. 44,421 (303) 526-1070